

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	207	reciprocal near4 phase near4 shifter	US-PGPUB; USPAT	OR	ON	2007/01/04 17:52
S2	126	(non adj reciprocal or bi adj directional or bidirectional) near4 phase near4 shifter	US-PGPUB; USPAT	OR	ON	2006/12/22 13:11
S3	2642	455/575.5.ccls. or 455/575.7.ccls. or 455/101.ccls. or 455/129.ccls. or 455/272.ccls. or 455/273.ccls. or 455/274.ccls. or 455/275.ccls. or 455/276.1.ccls.	US-PGPUB; USPAT	OR	ON	2006/12/22 13:12
S4	4154377	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/12/10 10:03
S5	1598	S3 and S4	US-PGPUB; USPAT	OR	ON	2006/12/22 13:14
S6	369	S5 and phase near2 shift\$2	US-PGPUB; USPAT	OR	ON	2006/12/22 13:14
S7	1107	reciprocal near4 phase	US-PGPUB; USPAT	OR	ON	2007/01/04 17:52
S8	4156664	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/01/04 17:52
S9	935	S7 and S8	US-PGPUB; USPAT	OR	ON	2007/01/04 17:52
S10	31	S9 and "455"/\$.ccls.	US-PGPUB; USPAT	OR	ON	2007/01/04 17:52
S11	8	("4107609").URPN.	USPAT	OR	ON	2007/01/04 19:32
S12	6	07/330617	US-PGPUB; USPAT	OR	ON	2007/01/04 19:33
S13	1	"4445098".pn.	US-PGPUB; USPAT	OR	ON	2007/01/04 19:33
S14	1412	(bidirectional or two adj way or bi adj directional) near4 phase	US-PGPUB; USPAT	OR	ON	2007/01/04 19:34
S15	1144	S14 and S8	US-PGPUB; USPAT	OR	ON	2007/01/04 19:34
S16	43	S15 and "455"/\$.ccls.	US-PGPUB; USPAT	OR	ON	2007/01/04 20:10
S17	2163	power adj divider and phase adj shift\$3	US-PGPUB; USPAT	OR	ON	2007/01/04 20:10
S18	1820	S17 and S8	US-PGPUB; USPAT	OR	ON	2007/01/04 20:11
S19	535	S18 and (bi adj directional or bidirectional or reciprocal or two adj way)	US-PGPUB; USPAT	OR	ON	2007/01/04 20:13

## EAST Search History

S20	256	S18 and (bi adj directional or bidirectional or reciprocal or two adj way) same phase	US-PGPUB; USPAT	OR	ON	2007/01/05 14:08
S21	15	power adj divider and transceiver and (phase near4 adjust\$3 or shift\$3) same (bi adj directional or bidirectional or non adj reciprocal)	US-PGPUB; USPAT	OR	ON	2007/01/05 14:09
S22	16	"255,082"	US-PGPUB; USPAT	OR	ON	2007/01/05 14:17
S23	1	"4445098".pn.	US-PGPUB; USPAT	OR	ON	2007/01/05 14:19
S24	6	07/330,617	US-PGPUB; USPAT	OR	ON	2007/01/05 14:56
S25	196	(non adj reciprocal) adj phase near4 shift	US-PGPUB; USPAT	OR	ON	2007/01/05 14:57
S26	4156664	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/01/05 14:57
S27	184	S25 and S26	US-PGPUB; USPAT	OR	ON	2007/01/05 15:03
S28	36	full adj duplex with phase adj shift	US-PGPUB; USPAT	OR	ON	2007/01/05 15:04
S29	31	S28 and S26	US-PGPUB; USPAT	OR	ON	2007/01/05 15:07
S30	12	bidirectional adj phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/01/05 15:10
S31	648	three adj port adj circulator	US-PGPUB; USPAT	OR	ON	2007/01/05 15:10
S32	578	S31 and S26	US-PGPUB; USPAT	OR	ON	2007/01/05 15:11
S33	254	S32 not optical	US-PGPUB; USPAT	OR	ON	2007/01/05 15:11
S34	58	S33 and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/01/05 15:16
S35	127	second adj antenna and power adj divider and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/01/05 15:16
S36	103	S35 and S26	US-PGPUB; USPAT	OR	ON	2007/01/05 16:10
S37	0	dipole and "180" near2 at adj most	US-PGPUB; USPAT	OR	ON	2007/01/05 16:13
S38	0	dipole and degrees near2 at adj most	US-PGPUB; USPAT	OR	ON	2007/01/05 16:13
S39	161	dipole and degrees near2 most	US-PGPUB; USPAT	OR	ON	2007/01/05 16:14
S40	8	dipole adj antenna and degrees near2 most	US-PGPUB; USPAT	OR	ON	2007/01/05 16:27

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S41	39	parallel with aligned same dipole adj antenna	US-PGPUB; USPAT	OR	ON	2007/01/05 16:27
S42	65	three near4 circulator same phase near4 shift\$3	US-PGPUB; USPAT	OR	ON	2007/04/13 13:04
S43	4169736	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/04/13 13:04
S44	4169736	S43	US-PGPUB; USPAT	OR	ON	2007/04/13 13:04
S45	57	S42 and S43	US-PGPUB; USPAT	OR	ON	2007/04/13 13:10
S46	2781	455/575.5.ccls. or 455/575.7.ccls. or 455/101.ccls. or 455/129.ccls. or 455/272.ccls. or 455/273.ccls. or 455/274.ccls. or 455/275.ccls. or 455/276.1.ccls.	US-PGPUB; USPAT	OR	ON	2007/04/13 13:30
S47	4169736	S43	US-PGPUB; USPAT	OR	ON	2007/04/13 13:30
S48	1627	S43 and S46	US-PGPUB; USPAT	OR	ON	2007/04/13 13:30
S49	3328	port near4 circulator	US-PGPUB; USPAT	OR	ON	2007/07/13 11:17
S50	4179425	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/07/13 11:17
S51	2535	S50 and S49	US-PGPUB; USPAT	OR	ON	2007/07/13 11:19
S52	908	S51 not optical	US-PGPUB; USPAT	OR	ON	2007/07/13 11:26
S53	540	S52 and phase	US-PGPUB; USPAT	OR	ON	2007/07/13 13:43
S54	87	(with\$1out or no or zero) with phase with (difference or shift or off\$1set or change) same circulator	US-PGPUB; USPAT	OR	ON	2007/07/13 13:49
S55	2090	(with\$1out or no or zero) with phase with (difference or shift or off\$1set or change) same phase near4 shifter	US-PGPUB; USPAT	OR	ON	2007/07/13 14:00
S56	1706	S55 and S50	US-PGPUB; USPAT	OR	ON	2007/07/13 14:00
S57	64	S56 and port near4 circulator	US-PGPUB; USPAT	OR	ON	2007/07/13 14:05
S58	31	S57 not optical	US-PGPUB; USPAT	OR	ON	2007/07/13 14:06
S59	104	port near4 circulator with phase near4 shift\$2	US-PGPUB; USPAT	OR	ON	2007/07/16 08:25

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S60	78	S59 not optical	US-PGPUB; USPAT	OR	ON	2007/07/16 08:39
S61	1	"4801901".pn.	US-PGPUB; USPAT	OR	ON	2007/07/16 08:39
S62	123931	power adj divider and transceiver near4 diversity and second antenna and phase shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 08:42
S63	9153	power adj divider and transceiver near4 diversity and second antenna and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 08:42
S64	1969468	j	US-PGPUB; USPAT	OR	ON	2007/07/16 08:42
S65	52089	power adj divider and transceiver near4 diversity and second adj antenna and phase shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 08:42
S66	1	power adj divider and transceiver near4 diversity and second adj antenna and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 08:43
S67	12	power adj divider and diversity and second adj antenna and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 08:46
S68	419	power adj divider and second near4 antenna and phase adj shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 09:54
S69	4179423	@ad<="20030321"	US-PGPUB; USPAT	OR	ON	2007/07/16 08:48
S70	328	S69 and S68	US-PGPUB; USPAT	OR	ON	2007/07/16 08:48

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S71	298	(US-20060183437-\$ or US-20010020915-\$ or US-20010022557-\$ or US-20010031648-\$ or US-20020008672-\$ or US-20020024468-\$ or US-20020047800-\$ or US-20020158798-\$ or US-20020171599-\$ or US-20030201940-\$ or US-20030210204-\$ or US-20030222818-\$ or US-20040038702-\$ or US-20040259597-\$ or US-20050035910-\$ or US-20050062649-\$ or US-20050068231-\$ or US-20050143132-\$ or US-20060125709-\$ or US-20020086708-\$ or US-20040137840-\$ or US-20040150569-\$ or US-20040174298-\$ or US-20050014533-\$ or US-20050192059-\$ or US-20050288032-\$).did. or (US-20060052065-\$ or US-20060052139-\$ or US-20060211374-\$ or US-20060281473-\$ or US-20070042717-\$ or US-20070103369-\$ or US-20070152892-\$ or US-20060208944-\$ or US-20020061051-\$ or US-20020071406-\$ or US-20020115473-\$ or US-20020198026-\$ or US-20030128677-\$ or US-20040027304-\$ or US-20040077378-\$ or US-20040131038-\$ or US-20040252055-\$ or US-20050030249-\$ or US-20050101352-\$ or US-20050212714-\$ or US-20050245206-\$ or US-20060003808-\$ or US-20060072528-\$ or US-20060183438-\$ or US-20060209883-\$ or US-20030103015-\$ or US-20010020917-\$).did. or (US-20020113742-\$ or US-20040014433-\$ or US-20040023693-\$ or US-20040169602-\$ or US-20040198393-\$ or US-20040266354-\$ or	US-PGPUB; USPAT	OR	ON	2007/07/16 09:34
12/10/2007 4:25:44 PM		C:\Documents and Settings\channon\My Documents\EAST\Workspaces\Pietig - 10549558.wsp				Page 5

## EAST Search History

S72	239	S71 and @ad<="20030321"	US-PGPUB; USPAT	OR	ON	2007/07/16 09:34
S73	748	(power adj divider or splitter) and second near4 antenna and phase near2 shifter	US-PGPUB; USPAT	OR	ON	2007/07/16 09:54
S74	563	S73 and S69	US-PGPUB; USPAT	OR	ON	2007/07/16 10:05
S75	133	S74 and transceiver	US-PGPUB; USPAT	OR	ON	2007/07/16 11:16
S76	2	reciev\$3 near4 phase near4 (difference)	US-PGPUB; USPAT	OR	ON	2007/07/16 11:19
S77	0	(zero or no) with phase with difference same reciever	US-PGPUB; USPAT	OR	ON	2007/07/16 11:21
S78	3	(zero or no) same phase same difference same reciever	US-PGPUB; USPAT	OR	ON	2007/07/16 11:22
S79	48830	(zero or no) same phase same difference	US-PGPUB; USPAT	OR	ON	2007/07/16 11:22
S80	200	S79 and "I11"	US-PGPUB; USPAT	OR	ON	2007/07/16 11:22
S81	43	S79 and reciever	US-PGPUB; USPAT	OR	ON	2007/07/16 11:23
S82	35	S81 not optical	US-PGPUB; USPAT	OR	ON	2007/07/16 11:23
S83	10	("3187274"   "3517223"   "3544999"   "3667065"   "3700832"   "3860893"   "4266204").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 11:31
S84	3	("4801901").URPN.	USPAT	OR	ON	2007/07/16 11:35
S85	1335	receiv\$3 with phase same (adjust\$4 or shift\$3 or correct\$3) and transmit\$4 same (no or without) near4 phase same (adjust\$4 or shift\$3 or correct\$3)	US-PGPUB; USPAT	OR	ON	2007/12/10 10:06
S86	4192002	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/12/10 10:06
S87	980	S85 and S86	US-PGPUB; USPAT	OR	ON	2007/12/10 10:06
S88	79	S87 and second near4 antenna	US-PGPUB; USPAT	OR	ON	2007/12/10 11:15
S89	229	circulator and phase near4 shift\$3 near4 receiv\$3 and phase near4 shift\$3 near4 transmit\$4	US-PGPUB; USPAT	OR	ON	2007/12/10 11:16
S90	181	S89 and S86	US-PGPUB; USPAT	OR	ON	2007/12/10 11:28

## EAST Search History

S91	640	three near4 port near4 circulator and (two near4 way or bi\$1directional or non\$1reciprocal)	US-PGPUB; USPAT	OR	ON	2007/12/10 11:28
S92	525	S91 and S86	US-PGPUB; USPAT	OR	ON	2007/12/10 11:29
S93	55	S92 and second near4 antenna	US-PGPUB; USPAT	OR	ON	2007/12/10 11:29
S94	34	S93 and phase near4 shift\$3	US-PGPUB; USPAT	OR	ON	2007/12/10 12:14
S95	4230816	without or "not" same phase near4 shift\$3 and non\$1reciprocal and port near4 circulator	US-PGPUB; USPAT	OR	ON	2007/12/10 12:15
S96	64	(without or "not") same phase near4 shift\$3 and non\$1reciprocal and port near4 circulator	US-PGPUB; USPAT	OR	ON	2007/12/10 12:15
S97	53	S96 and S86	US-PGPUB; USPAT	OR	ON	2007/12/10 13:27
S98	4192002	@ad<="20030321" or @rlad<="2003321"	US-PGPUB; USPAT	OR	ON	2007/12/10 13:27
S99	64	(without or "not") same phase near4 shift\$3 and non\$1reciprocal and port near4 circulator	US-PGPUB; USPAT	OR	ON	2007/12/10 13:27
S100	53	S99 and S98	US-PGPUB; USPAT	OR	ON	2007/12/10 14:11
S101	0	S100 and transmit and recieve	US-PGPUB; USPAT	OR	ON	2007/12/10 13:28
S102	0	S99 and transmit and recieve	US-PGPUB; USPAT	OR	ON	2007/12/10 13:28